# Scheduling the Surveys

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The three surveys (Legacy, SEGUE, and SN) fit into a three-year observing plan, as described in the *SDSS-II Baseline Plan*.

The plan accommodates the footprints for Legacy (stripes 10 through 37) and SN (stripe 82).

At any time of year there are SEGUE tiles and stripes.

The plan accommodates the total amount of time required to undertake the science we have proposed.

The plan gives the expectations for the survey in terms of square degrees and number of spectra.

The plan was derived from an accounting of the available time, in hours, which is then converted to square degrees and spectroscopic plates.

stripe 20:

west 7h 40m + 9 center 12h 10m +25 east 16h 40m +11 The available observing time is based on averages of past performance (2000 through the present), which automatically accounts for weather and for observing efficiency.

the adopted number of hours available as a function of month is the time usable for spectroscopy

of that time, about 23% is acceptable for imaging (dark, good seeing, photometric)

#### more details

We do not observe in one dark run in July or August for mirror realuminization and for maintenance. We adopt 0.5 of the available time in those two months.

the SN imaging is done in spectroscopic time

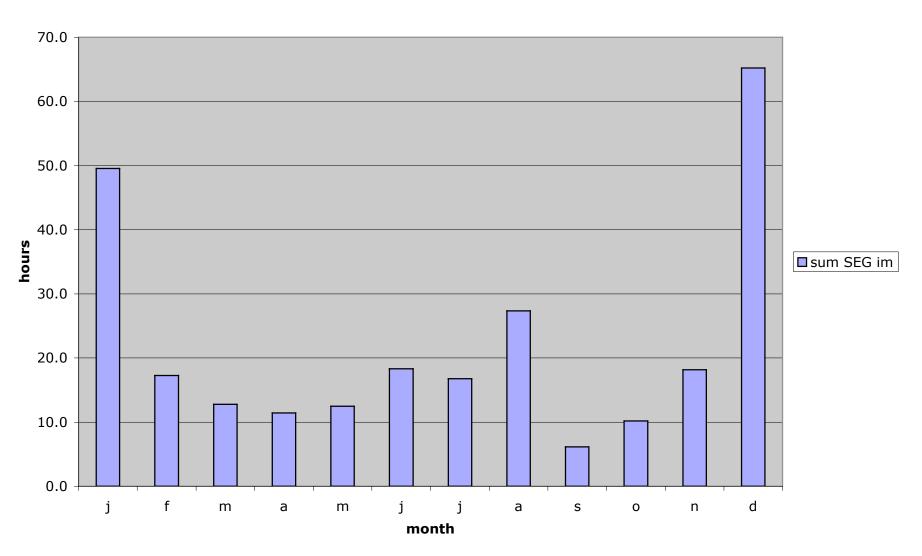
a degree of freedom is the order of obtaining Legacy and SEGUE plates Scheduling Formula:

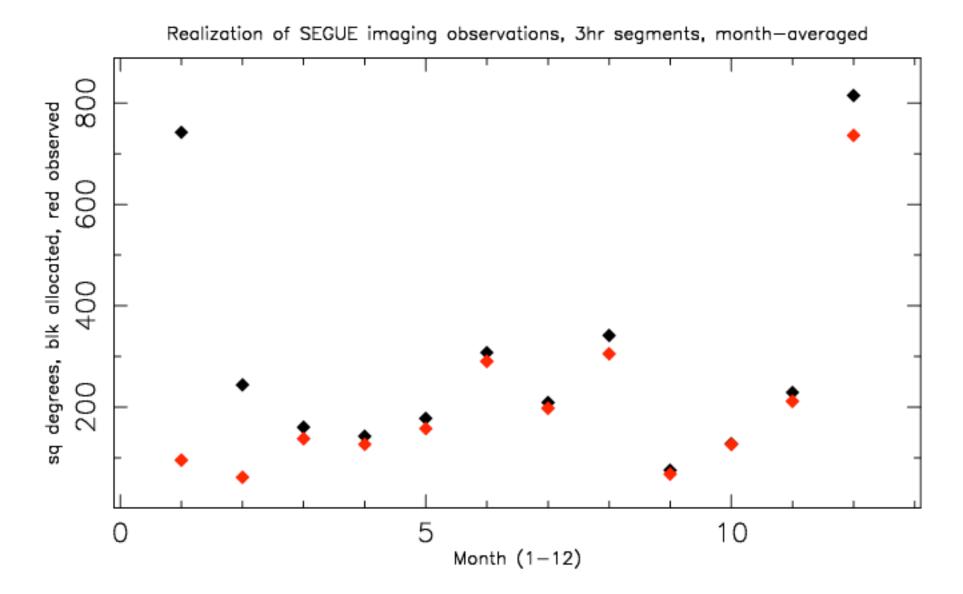
If an unobserved Legacy spectroscopic plate is available in the North Galactic Cap between stripes 10 and 37, observe that plate.

The SN survey is conducted 1 Sept - 30 Nov, but we will contrive to give some of these nights to SEGUE.

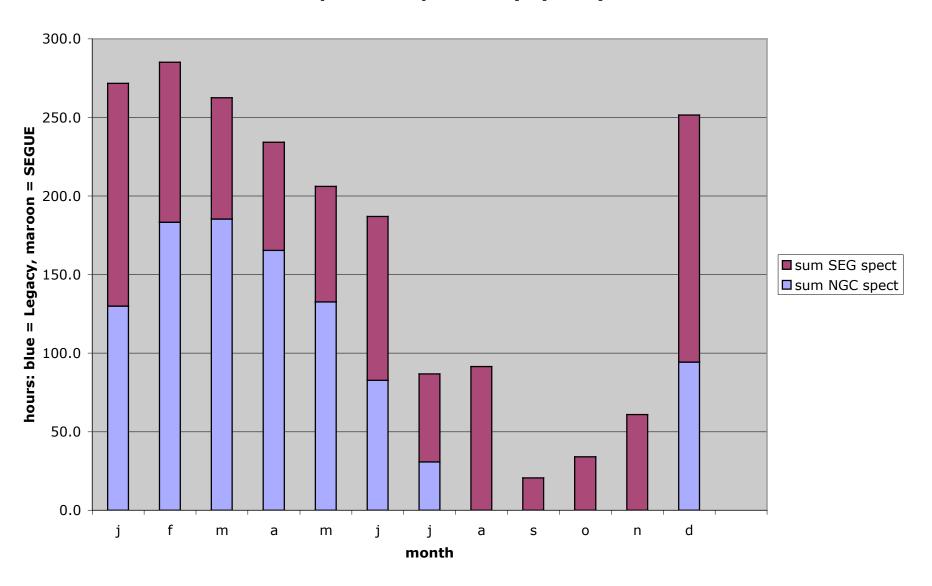
All other time is given to SEGUE.

# SEGUE imaging time (3 years)

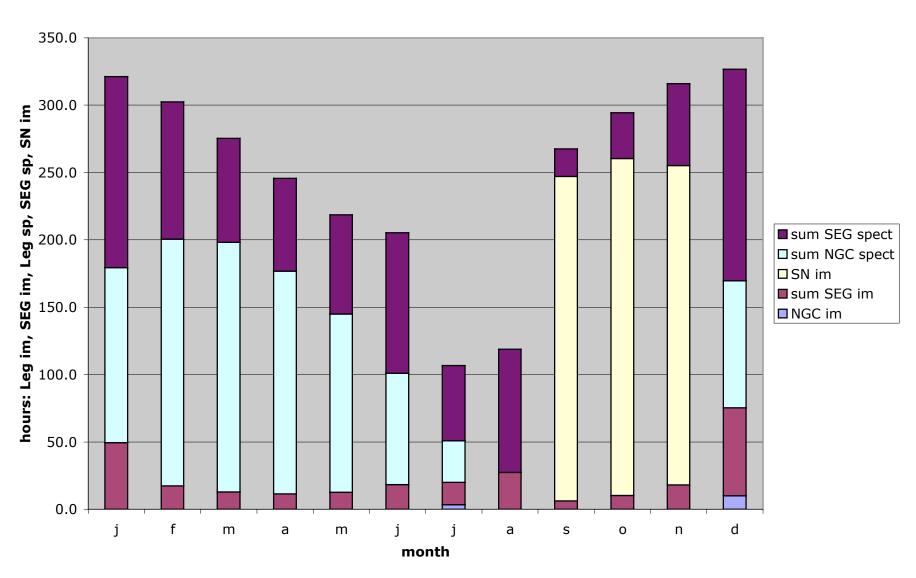




#### spectroscopic time (3 years)



#### total survey (3 years)



## **Imaging**

Legacy: if the weather improves this season, we may finish the stripe 10 - 37 area. Otherwise we will finish missing bits in 2006.

SEGUE: the *SDSS-II Baseline Plan* allocates enough time to obtain 3500 deg<sup>2</sup>.

### Spectroscopy

Legacy: as of the beginning of 2005, we required about 700 plates within the stripe 10 - 37 area. The *SDSS-II Baseline Plan* allocates enough time to obtain 744 plates.

SEGUE: The *SDSS-II Baseline Plan* allocates enough time to obtain 219 tiles (= one short and one long plate on the same 3-deg area of sky).

# Example of SDSS-I progress tracking chart: spectroscopy in the North Galactic Cap

